Subject: Re: Covariance Matrix
Posted by David Fanning on Sat, 07 Dec 2013 13:31:38 GMT
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Amin Farhang writes:

> I have N observed data as a vector, and I need to compute its NxN covariance matrix, but IDL correlate function just return one value as the correlation (or covariance) between two vectors and do not return a matrix.
> So how can I compute NxN covariance matrix of below vector (for example):
>
> IDL> A = [1,2,3,4,5]

If you only have one vector, the best you can do is calculate the way the numbers in the vector vary with respect to the mean of the vector. In other words, you can calculate the variance.

To do a COvariance, you measure how one vector varies with respect to one or more *other* vectors. Where is your vector B if you want to do a covariance?

Cheers,

David

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Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")